

INTERNATIONAL SEARCH REPORT

International Application No

PCT/FR2004/050747

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L23/48 H01S3/00 H01L21/58

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L H01S

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/096254 A1 (KOBER MICHAEL ET AL) 25 July 2002 (2002-07-25) column 2, paragraph 11 - column 12, paragraph 61; figures 1-7	1-6, 8, 10-13, 15-21
A	US 4 752 816 A (GOODFELLOW ROBERT C ET AL) 21 June 1988 (1988-06-21) column 2, line 28 - column 4, line 15; figures 1-4	1-10, 13-18
X	FR 2 777 124 A (COMMISSARIAT ENERGIE ATOMIQUE) 8 October 1999 (1999-10-08) page 10, line 1 - page 19, line 2; figure 1 ----- -/--	1-3, 14, 15, 17

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

2 May 2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 87/01509 A (PLESSEY OVERSEAS) 12 March 1987 (1987-03-12) page 7, line 15 - page 12, line 6; figures 1-5	1-4, 15-18
A	----- US 5 832 010 A (MOLVA ENGIN ET AL) 3 November 1998 (1998-11-03) the whole document	1-28
A	----- US 2003/072913 A1 (CHENG WIN-CHI ET AL) 17 April 2003 (2003-04-17) the whole document	1-28
A	----- US 2003/030066 A1 (HERMAN EDMUND PETER CLINTON) 13 February 2003 (2003-02-13) the whole document	1-28

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/FR2004/050747

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2002096254	A1	25-07-2002	TW	584972 B	21-04-2004
US 4752816	A	21-06-1988	GB	2137807 A	10-10-1984
			AT	54776 T	15-08-1990
			CA	1209716 A1	12-08-1986
			DE	3482719 D1	23-08-1990
			EP	0121402 A2	10-10-1984
			JP	60024048 A	06-02-1985
FR 2777124	A	08-10-1999	FR	2777124 A1	08-10-1999
WO 8701509	A	12-03-1987	AU	6336286 A	24-03-1987
			EP	0236410 A1	16-09-1987
			WO	8701509 A1	12-03-1987
US 5832010	A	03-11-1998	FR	2734092 A1	15-11-1996
			DE	69615264 D1	25-10-2001
			DE	69615264 T2	27-06-2002
			EP	0742615 A1	13-11-1996
			JP	8316557 A	29-11-1996
US 2003072913	A1	17-04-2003	TW	512504 B	01-12-2002
			JP	2003142622 A	16-05-2003
US 2003030066	A1	13-02-2003	GB	2378577 A	12-02-2003